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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,146	07/10/2003	Anca Faur-Ghenciu	GP-302809	1398
23368 7590 12/16/2008 DINSMORE & SHOHL LLP ONE DAYTON CENTRE, ONE SOUTH MAIN STREET SUITE 1300 DAYTON, OH 45402-2023				
EXAMINER				
HANDAL, KAITLY V				
ART UNIT		PAPER NUMBER		
1795				
MAIL DATE		DELIVERY MODE		
12/16/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/617,146

**Applicant(s)**

FAUR-GHENCIU ET AL.

**Examiner**

KAITY V. HANDAL

**Art Unit**

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-61 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/26/2008 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-61 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nunan (US 6,040,265).

With respect to claims 1-2, 4, 12-13, 15-16, 24-25, 27-29, 36-37, 42, 44-45, 50-51, 53-55, 59-60, Nunan teaches an apparatus for reducing an amount of carbon monoxide in process gas wherein the catalyst is a ceria based catalyst which promotes water gas shift reactions (col. 1, lines 43-56), the catalyst system comprising a noble metal/(Pt or Pd) (col. 10, line 65); a mixed metal oxide support consisting essentially of cerium oxide and zirconium oxide, wherein cerium oxide is

present in an amount from about 45% to about 90% by weight of mixed metal oxide and zirconium/lanthanum oxide is present in amount from about 10% to 55% by weight of mixed metal oxide (col. 10, lines 64 col. 11, lines 1-5), and a promoter comprising Yttrium (col. 11, line 7) in order to enhance the Ce or Zr promotional effect on catalyst performance in CO and NO<sub>x</sub> oxidation (col. 20, lines 45-50).

Nunan does teach that his catalyst is for reducing an amount of carbon monoxide in process gas wherein the catalyst is a ceria based catalyst which promotes water gas shift reactions (col. 1, lines 43-56), therefore it would be obvious if not inherent to place his invention into a water gas shift converter and pass the process fuel gas through the water gas shift converter. Furthermore, Nunan's catalyst is the same as that instantly claimed and therefore will perform as such.

With respect to claims 3, 14, 26, 38, 46, 56, Nunan further teaches wherein the noble metal/(group VIII) is present in an amount of between about 0.01% to about 4% by weight of total catalyst (col. 13, lines 40-43).

With respect to claims 5, 17, 30, 43, 52, 61, Nunan further teaches wherein the promoter is present in an amount of between 1% and about 20% by weight of total catalyst (col. 14, lines 23-25).

With respect to claims 6-7, 18-19, 31, 39-40, 47-48, 57, Nunan further teaches wherein the mixed metal oxide support further comprises a support dopant/(additional promoter) selected from lanthanum (col. 14, lines 8-15).

With respect to claims 8, 20, 32, Nunan further teaches wherein the support dopant/(additional promoter) is in the form of a metal oxide (col. 14, lines 8-21).

With respect to claims 9, 21, 33, 41, 49, 58, Nunan further teaches wherein the support dopant/(additional promoter) is present in an amount of between about 1% and about 20% by weight of mixed metal oxide (col. 14, lines 8-25).

With respect to claim 10-11, 22-23, 34-35, Nunan further teaches wherein the process fuel gas passes through the water gas shift at a temperature of about 225°C (col. 15, lines 53-57).

**If the options in the Nunan as to the various catalyst/promoter/dopant material groups appear non-anticipatory, then it is deemed obvious to one having skill in the art to choose from these options.**

### **Response to Arguments**

#### 1.131 Declaration

The Declaration presented by applicants is acceptable based on applicant's convincing remarks that Applicant is not required to show possession of claim 7 limitations.

#### Prior Art

Applicant's Declaration provided the necessary evidence to antedate the prior art of Silver. Therefore, a new rejection is made as set forth above in view of Nunan (US 6,040,265).

Applicant argues that Nunan does not teach or suggest use of their catalyst in a water gas shift converter. Examiner respectfully disagrees and points out that Nunan does teach an apparatus for reducing an amount of carbon monoxide in process gas wherein the catalyst is a ceria based catalyst which promotes water gas shift reactions (col. 1, lines 43-56).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAITLY V. HANDAL whose telephone number is (571)272-8520. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexa Neckel can be reached on (571) 272-1446. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/K. V. H./  
Examiner, Art Unit 1795

12/3/2008

/Alexa D. Neckel/  
Supervisory Patent Examiner, Art Unit 1795

**Search Notes****Application/Control No.**

10/617,146

**Examiner**

KAITY V. HANDAL

**Applicant(s)/Patent under  
Reexamination**

FAUR-GHENCIU ET AL.

**Art Unit**

1795

**SEARCHED**

Class	Subclass	Date	Examiner
Updated	Search	12/3/2008	KH

**INTERFERENCE SEARCHED**

Class	Subclass	Date	Examiner

**SEARCH NOTES  
(INCLUDING SEARCH STRATEGY)**

	DATE	EXMR
Updated Key Word Search in EAST	12/3/2008	KH
Updated Inventorship Search	12/3/2008	KH